Applying Functional Behavior Assessment in schools

EDEX 701 Nature of students with disabilities

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Problem behaviors are part of everyday life of all teachers. Starting with the first day of school instructors of all grades and areas are preparing sets of rules and consequences for their students. For most of the time a strong set of routines implemented with consistency tends to have good results. However, year after year student with autism have proven to be a very challenging group that is not responding in the traditional way to the classical “following instructions” posted on the board. There are several reasons why teaching students with autism proves to be such a difficult group. The two main causes are the skill deficits in the areas of communication and socialization. The issues caused by communication deficits will surface when a child needs something but he does not have a way to express it. Because the child will ask for something he wants in a way that is usually not understood others his needs are usually not met and the child might employ other meanings of expressing them. Even though this might take different forms (e.g. from pointing to an object, to making repeating sounds, screaming, to hitting or throwing things) the function of the behavior usually stays the same (a child wants a tangible, a break from his academic work, a hug, etc.). However some of these behaviors are not socially acceptable and can become problematic if they are aggressive towards others or to the individual himself. This does not only poses immediate danger to the individual but also in the long term it can alienate him from being able to be part of a community, make friends or be able to go out for social events. Solving problem behaviors became one of the most important issues in the research in the field of special education.

Based on the theory that a problem behavior has a communication function the Functional Behavior Assessment or FBA’s role is to determine the intent that a child is expressing through unconventional behaviors. FBA is a tool that was developed in order to help professionals to make better decisions when it comes to solving problem behaviors. Through FBA a teacher or behavior specialist can also identify replacement behaviors that would not only help to eliminate problem behaviors but also increase communication and social skills in order to include the child and make him a valuable member of the society.

The focus of this paper is to highlight the importance of a structured approach in indentifying the function of problem behaviors for students with autism in public schools. It is very important for the professionals in the field who are working with a student with autism to have a common approach and understanding of the problem behaviors. This can lead to a better understanding of what causes the behavior/s and also eliminate any discrepancies in the intervention plan. The results of conducting a FBA showed that “information on antecedents and consequences was consistent when derived from a structured behavioral questionnaire completed by the teacher or when the questionnaire was administered in an interview format by a behavior analyst (Ellingson, S. A, Miltenberger, R. G., Galensky T. L., Garlinhouse, M. 2000).”

When introduced in 1997 FBA was one of the core concepts of IDEA. The important message was that behavioral interventions should involve the whole school, and that successful implementation emphasizes the identification, adoption, and sustained use of effective policies, systems, data-based decision making, and practices (Sugai and Horner, 2000).

Participants and setting

For the purpose of this paper I conducted a FBA for a 4th grade student at an elementary school in Hopkins, SC. Nigel is a 10 year old boy diagnosed with autism and language impairment. Nigel has good communication skills and he has many friends at school. He likes to play computer, video games, and Nintendo DSI. Nigel enjoys science projects and is a very good reader (he reads on the fifth grade level). Nigel goes to resource class for 2 hours per day. He goes to speech two times a week for a 30 minutes period. Nigel also receives occupational therapy services for 30 minutes per week. In addition to this Nigel has a full time personal instructional assistant (shadow) who stays with him for the entire day. The responsibilities of the assistant are to help Nigel with academic instruction as well as with transitions and schedule.

Procedure

A FBA was conducted on 9/16/2011 and 9/17/2011 in order to establish the function of his problem behaviors. The persons involved in the interviews were the parent, the instructional assistant, the resource teacher and me.

The functional behavior interview consists of 11 major parts: behavior definitions, setting events, antecedents, consequences, efficiency of the problem behaviors, possible alternative behaviors the person already knows, main ways of communication, things that the teacher should avoid when working with the student, intervention history, summary statements. Each part has a set of different questions that allows the interviewer to collect specific information about the student.

Two problem behaviors were identified in the beginning. Verbal aggression was defined for when Nigel was saying: “No! Leave me alone. Shut up! You are fired! I don’t care” etc. Physical aggression was defined for when Nigel was throwing papers, pencils, books, kicking desks or chairs.

No particular setting events were identified. However the mother specified that when Nigel cannot sleep he has problems at home in the morning and later at school. Also the mother believes that the milk and the wheat cereal are affecting his behavior. The only setting event identified by the teacher and instructional assistant was the breakfast in the morning.

Eleven activities were identified in Nigel’s daily schedule. These activities include breakfast, speech, science class, social studies, accelerated reading, resource class (2 periods), related arts (music or PE), lunch, recess. The interview with the instructional assistant reveals that Nigel is attending the social studies class only for a 30 minutes period instead of a whole period. The social studies teacher says that according to the schedule Nigel was not supposed to be in her class but in the resource class. However, because the resource teacher’s time is split between two schools Nigel has no choice but to go to her class since the resource teacher is out in the morning. The district did not find a solution yet to cover her students in the morning while she is attending the other school. The social studies teacher also says that the work in her class is above his skills level and that most of the time the instructional assistant has to help him with the academics. Other questions revealed that the schedule is predictable to the student. The instructional assistant gives him 5 minutes warnings before moving to other classes. Nigel also has a binder with his daily schedule inside that he can check every time he needs it. However, for most of the time he has to be reminded to use it. In case there is a change in schedule such as the teacher is late or absent the instructional assistant takes the Nigel to the library where they read a book.

Some of the antecedents identified in the FBA were: waiting in line in the cafeteria, academic work demands in social studies class and resource class. When compared with the information obtained from the instructional assistant and the teacher the parent interview did not yield any different information other than a set of antecedents that were specific for the home environment. However, because the intervention was going to be implemented at school these events could only be considered as having a setting event value more than an antecedent.

A few functional alternative behaviors were identified. Nigel knows how to ask for things such as food, a break or help during academic work, ask for restroom or free time. He has good communication skills. He speaks in complete sentences. However the classroom teacher needs to remind him to control his voice level when in the classroom and also to wait for his turn when others are talking. He is also able to follow multiple steps directions and respond to gestural prompts. When interviewed the resource teacher and the instructional assistant said that the following things should be done when working with Nigel: reduce the amount of work, offer reinforcers for completed work, provide a predictable environment and provide reinforcement for appropriate behavior. Some of the things that should be avoided included changes in the routine and giving him assignments that are too long.

A short reinforcement assessment revealed that Nigel likes primarily playing computer and video games such as Nintendo DSI, computer games such as Mario, and Wii. He likes to eat pizza, strawberry shortcake, gummy bears and peanuts. Nigel also enjoys playing board games, baking and science projects. At home he likes going with his mother at the mall and different restaurants and fast food places.

The final part of the interview includes information about the history of the behaviors and also about the interventions that have been tried in the past. Nigel started displaying these behaviors when he was in kindergarten. He did not want to complete or participate in classroom activities because he wanted to play on the computer. The strategy tried with Nigel was offering him computer time after finishing part of his work. When he had a tantrum Nigel was sent to a designated area to calm down. The strategy had moderate success. Nigel still displayed problem behaviors and had difficulties completing his work.

After the interview I designed a data sheet (see Appendix A) in order to collect information about the frequency and topography of the behavior. The data sheet included an antecedent column, the behaviors identified in the FBA (verbal and physical aggression), consequences as well as a column to describe the emotional state of the student during each class (happy, neutral or angry).

Results

An analysis of the data shows that even though there is a higher incidence of the behaviors during the social studies and resource class, a clear pattern could not be identified. The results of 4 days of data collection are displayed in the tab in Appendix B.

Due to the fact that data was not specific enough to conclude a summary statement and to design a behavior intervention plan, a more detailed set of observation was necessary in order to identify the “trigger” or the event that was setting the problem behaviors. For this purpose I went to observe Nigel in his social studies class as well as in his resource class by using an antecedent, behavior, consequence or ABC observation form (see Appendix D). The ABC form captures the event before, the behavior and the maintaining consequence. A total of six hours of observation were collected. Besides the initial settings (social studies and resource room) several other environments were included: library during accelerated reading, speech room and the hallway.

The ABC observation revealed a couple of trigger events that were observed at different times across various environments. These two events were math work and writing. Even though they did not always cause the behaviors to occur the frequency was much higher when compared with other events. Other situations observed included games (missing pieces for a board game in the speech room, the teacher accidently touching Nigel’s hand with a pen and creating a minor scratch, a story he thought he already read it during accelerated reading in the library, and a short discrepancy between the speech therapist and the instructional assistant decision to allow Nigel to play on the computer). These events did not repeat during any time of the observation and even though they made Nigel have an outburst they were not considered as the main “trigger” event. For these reason they did not appear in the summary statement. I consider that prioritizing the problem behaviors and structuring the environment in such a way that the verbal and physical aggression will be replaced by other social acceptable behaviors in his academic setting the other problems that occur in other places will also decrease. A summary statement is included in Appendix C.

Discussion

Data collected through the FBA offers a good base for a strong behavior intervention plan. However, the information has to be analyzed very carefully and replacement behaviors chosen in such a way that it will actually enhance the performance of the student in school. A study by Scott M and McIntyre J (2005) revealed that school personnel are more likely to implement punitive and exclusionary strategies when compared with teams of behavior analysts. Therefore public schools need the service of highly trained specialists in the area of behavior (O’Neill, Johnson et. al 2001). These specialists can provide training and guidance to the teachers who are dealing with such behaviors in their class. This way schools can promote communication and socialization skills rather than focusing on behavior reduction.

Besides FBA some other information that can be taken into consideration is the psychological evaluation. The level of comprehension (listening, reading) in Woodcock Johnson might reveal a great discrepancy between Nigel’s reading level and what he can actually comprehend from the text. This is a major concern since Nigel’s FBA shows that one of the areas where he is mostly struggling is social studies. The FBA shows that writing is one of the areas of concern but the content of the assignment can also offer important information about the function of the behavior. If Nigel’s comprehension level is on a second grade level and the questions and the text he has to read is on the fourth grade level this might be too difficult for him to do. In this case he would require more help to complete the assignment.

Another thing that needs further investigation is the level of success in the curriculum. This will provide information about how much of the school work is he able to do on his own. Usually the rule of thumb is that the student has to be successful at least for the 80% of his work. This ensures that the work is not becoming punishing for him and that he enjoys engaging in academic activities. In this situation the classroom teacher and the instructional assistant will have to be trained to provide the right amount of support and when necessary fade the prompts to allow Nigel to perform independently.

Conclusion:

The functional behavior assessment conducted on Nigel allowed the identification of the function of his problem behaviors. A thorough analysis of other factors such as level of comprehension, the degree of academic success will also provide a more complete picture of Nigel’s skills in relationship with the academic work that he has to complete at school. At this moment Nigel is up for a 3 year evaluation with the school district and the psychological evaluation is pending.

References

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Appendix A

Data sheet

**Student**: Nigel Liles

Date: \_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities** | **Antecedents (circle one)** | **Verbal aggression** | **Physical aggression** | **Consequence** | **Mood (circle one)** |
| Breakfast | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Speech | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Reading (Cham) | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Social studies | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Resource read | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Success Maker | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Lunch | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Recess | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Science | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Resource Math | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| PE | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Fire Drill | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |
| Assembly | IW D CR WA FT |  |  | AW GA GT | Happy, neutral, angry |

**Verbal aggression**: Nigel says “Leave me alone”, “I don’t want to do it”, “This is not fair”, whining, raising voice

**Physical aggression**: Nigel throws objects such as pencils, books, chairs or toys.

**Instructions**: Circle one of the antecedents: IW – independent work, D – teacher giving directions, CR – change in routine, WA – waiting, FT – finishing free time.

Place a tally mark in the appropriate box each time a behavior occurs. For each behavior circle one or more of the consequences: AW – avoid work, GA – get attention (positive or negative), GT – get tangible (computer time, free time, snack, toy, coloring, book, puzzle)

Appendix B

Data sheet

**Student**: Nigel Liles

Date: 10/03, 10/04, 10/05, 10/06

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activities** | **Antecedents (circle one)** | **Verbal aggression** | **Physical aggression** | **Consequence** |
| Resource read | IW D CR WA FT | 6 | 1 | AW GT |
| Success maker | IW D WA FT | 5 | 2 | AW GA GT |
| Lunch | D WA | 4 | 1 | GA |
| Resource Math | IW D CR WA FT | 6 | 5 | GA GT |
| Assembly | D FT | 6 | 2 | AW GA |
| Reading (Cham) | IW D CR WA FT | 13 | 1 | AW GA GT |
| Science | IW D | 3 | 2 | AW GA GT |
| Speech | IW D CR WA FT | 6 | 1 | AW GA GT |
| Breakfast | WA | 2 | 1 | GT |

IW – independent work, D – teacher giving directions, CR – change in routine, WA – waiting, FT – finishing free time.

Consequences: AW – avoid work, GA – get attention (positive or negative), GT – get tangible

Appendix C

Summary statement

|  |  |  |  |
| --- | --- | --- | --- |
| Setting event | Antecedent | Behavior | Consequence |
| -someone sits in his place at breakfast  - receives a long lecture  - changes in schedule | - math work  - writing (comprehension) | Verbal aggression  Physical aggression | 1. Escape work  2. Get help  3. Get attention  4. A combination of the 3 above |

Summary statement:

When presented with math and writing assignments Nigel becomes verbally and physically aggressive to escape, get help, get attention or a combination of the 3 above.

Appendix D

ABC observation forms (samples):



